

Atty. Docket No.: 705579US1

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A suspension system for a vehicle having parallel wheel assemblies, the suspension system comprising:
longitudinally extending vehicle frame members; and
a composite spring with two ends, said composite spring having a sinusoidal neutral axis in a free state and [[transversely spanning]] being perpendicularly positioned across said vehicle frame members, wherein said two ends are connected to the [[between the]] parallel wheel assemblies.

2. (Previously Presented) The vehicle suspension system of Claim 1, further comprising means for pivotally supporting said composite spring between said vehicle frame members.

3-7. (Cancelled)

8. (Previously Presented) The vehicle suspension system of Claim 1, said composite spring having a sinusoidal neutral axis further comprising carbon fiber spanning the length of said spring at said neutral axis.

Atty. Docket No.: 705579US1

9. (Previously Presented) The vehicle suspension system of Claim 8, said composite spring having a sinusoidal neutral axis further comprising carbon fiber spanning the length of said spring below said neutral axis.

10. (Previously Presented) The vehicle suspension system of Claim 9, said composite spring having a sinusoidal neutral axis further comprising glass fiber spanning the length of said spring and surrounding said carbon fiber.

11. (Previously Presented) The vehicle suspension system of Claim 10, said composite spring having a sinusoidal neutral axis further comprising a rectangular cross-section, said cross-section having an equal surface area at all points along the length of said leaf spring as measured in a plane perpendicular to said neutral axis.

12. (Previously Presented) The vehicle suspension system of Claim 11, said rectangular cross-section of said composite spring having a sinusoidal neutral axis further having rounded edges, wherein each of said edges is formed of a 5/16" radius.

13-27. (Withdrawn)